

10
STOUT (A.B.)

REPORT

ON

ABATTOIRS AND PUBLIC BATHS.

By A. B. STOUT, M. D.,

Member of the State Board of Health.



SACRAMENTO, CAL.

1879.

REPORT ON ABATTOIRS AND PUBLIC BATHS.

BY A. B. STOUT, M. D., MEMBER OF THE STATE BOARD OF HEALTH.

REFORM OF SLAUGHTER HOUSES.

San Francisco, June 21st, 1879.—At 7:30 A. M. I started to visit the butchery establishment on San Francisco Bay, near West Berkeley, and the bathing establishments of Alameda. The morning was rather foggy; a brisk west breeze blew in through the Golden Gate. We arrived at 10:15 at the abattoirs by the railroad which passes on the east border (lee side) of the extensive slaughtering works which here skirt the margin of the bay. The abattoirs are built on a bluff, about fifteen feet above the sand beach. It was nearly dead low tide, the beach underneath the slaughter houses being left perfectly bare. The beach under the works, from which the water had receded, was as perfectly clean and clear from offal as though immediately over it were no extensive swine pens nor active abattoirs. The swine are kept there on a platform, slightly dipping seaward, with troughs to receive the blood and water which flow from the felling platform eastward and on a higher level.

This shows that no more favorable conditions for an inoffensive abattoir could be demanded. But forthwith the parasite appears, the persistent fat-tryer sets up his greasy boiler.

From the moment the railroad bridge, near the works, is passed, the atmosphere, which travelers on the road must breathe, is saturated with the odors which try men's stomachs. Marshall's respirator, unbecoming indeed to ladies' faces, becomes an indispensable luxury. The adjacent land is now unoccupied, and will remain so if this objection continue. It is a killing cloud on title. The railroad brings all the cattle to the fine inclosures for their reception and their rest from fatigue, with best of fodder and water for their relief, and cannot be dispensed with, the public comfort and health to the contrary notwithstanding; but the "trying" nuisance may be abated. It is no use to say to struggling industry, "try on, try ever;" in this case we must exclaim, let us stop trying.

July 11th—Visited the beef and sheep abattoirs of Butchertown, and met ex-Supervisor Shrader, who with utmost courtesy showed up everything—also the abattoirs of Lux & Miller. Unless we except the great "Mardi Gras" of the French, when the great competitive match to produce the fattest meats is entered into, it would be difficult to find, in any country, a finer exhibition of products on an average day for the diurnal supply of a city. The rapidity of execution, and the perfectly practical and cleanly performance of all the work, could not, we believe, be excelled. Unfortunately for our disposition and duty to find fault freely, but fairly, the tide was high and the wind blew a moderate gale; yet from the moment we passed Gray's Station, on the Long Bridge, the air was redolent of coming scenes and perfumes. We might have exclaimed—a respirator, a

respirator, our kingdom for a respirator! But this was high tide with a strong sea breeze blowing; but we were informed that there was a tide in the affairs of men, which, if taken at low ebb and nor-western gale of Araby blowing, that the atmospheric pressure on the olfactory nerves would lift off the hat from our head.

Several years ago, when a sharp and protracted contest was going on between the people and the butcheries at Mission Creek, to effect the removal of the latter, we set forth a systematic method by which to sanify butcheries wherever located. The views then expressed still merit republication and adoption. The abattoirs were removed to their present location. Large tracts of land in the center of the city have been restored to habitation and increased taxable land. But, although a great amelioration was obtained, the butcheries have only been partially improved for want of a general jurisdiction and uniform system of conducting the business. The nuisances have not been suppressed, but transferred to another locality. Gardenville, in a word, all South San Francisco, is becoming unhealthy and uninhabitable. In certain conditions of the atmosphere, the Roman Catholic Orphan Asylum is inundated with the pestilential odors, and either the butcheries and their attendant still greater nuisances must be invited "to go" again, or be induced to adopt, or forced to inaugurate, a new system. If they will reform, they do not need to go. The beef and sheep butcheries are the least offensive—the swineries are much more intolerable—but worst of all are their parasitical attendants, the tallow and lard tryers, the glue and soap makers, and all the variety of makers that live on the "material" they obtain from the abattoirs. At present each throws the blame on the other. The suffering community is rather disposed to exonerate the butchers. But together they care but little for the suffering community, and should together be held responsible. While the butchers remain the others will stay. If they go, the others will move off with them. If all the tryers of fats, etc., etc., were compelled to do their boiling under domes fitting closely to their boilers, and the vapors were carried through iron cylinders heated to redness, involving but little expense, their stinking, death-dealing effluvia would be destroyed. As it is, it is worse to go through their midst than for land folk to go to sea.

THE LOCATION AND CONSTRUCTION OF ABATTOIRS.

EDS. TIMES: I observe among those who protest against the location of the abattoir at the foot of Webster Street, the names of gentlemen who reside so far from the scene of operations that their fear of pestilential odors must be the only ground of their remonstrance. But those gentlemen and all the public may be assured that as far as noxious emanations from the abattoir are involved, they may remain unconscious of its presence, nor will their lands depreciate in value. If they wish to know of the abattoir they must search for it. If I believed their homes or their lands would be thus rendered disgusting or unsaleable, I certainly could not so far forget the proprieties of life as to advocate the location. There is no idea of partiality in the proposition, for the time will come when, like Paris, San Francisco will furnish its inhabitants from abattoirs in the southern and western parts of the city, as well as from its northern extremity. But these will be inodorous, and harmless as any other vast operation which supplies on a large scale the unavoidable necessities of the people. The signatures of those who favor the northern location are more numerous than of those who protest, and their united interest is very great.

Where populations are great and dense, they must live by systems. Combined and often complicated methods will overtop individual efforts. Companies with costly apparatus will overwhelm private enterprises. If in union there is power, the truth of the maxim will be realized in these great works of humanity. The machine bread-maker will feed the people cheaper than the private baker. Steam laundries will break the manufacturer of wash-boards; and the abattoir, with its instantaneous manipulation by scientific and economic processes of all its material from hoof to horn, will anticipate decomposition and provide a healthier, cheaper, fatter meat to the people.

The consolidated slaughter-house system recommends itself to public adoption by the fact that the large capital required for its construction insures for it a directorship of competent trustees to enforce the strictest order and cleanliness. The false economy, the selfishness, the ignorance of one set of individuals cannot throw odium on the honest dealing and liberality of another. As a system, all its parts must operate continuously and in harmony, because the profits of all its parts are derived consecutively one from the other. As regards the dreaded effluvia, which are the gaseous products of decomposing organic matter, they cannot occur, for those substances are utilized before decomposition commences. In fact, these gases are too valuable to be lost; they are employed in the combinations of useful products, by anticipating their evolution in the form of noxious gases. Twelve hours suffice to convert the living animal into a variety of conditions preparatory to their final appearance in the form of chemical products and animal material for fertilizing the soil. Neither the atmosphere which fills the city nor the waters of the bay can be polluted by impurities, for every part and portion of the animal, from the hair to the bone, are converted into saleable and valuable products. It may even be asked if the refuse of an animal, when properly economized, will not produce more than his meat, which is sold by the pound for food. The difficulty in the calculation is that in selling by the pound bone and other parts are included, which are lost to the consumer, although paid for at the price of the dearest meat.

A general idea of the working of an abattoir may be formed from the following description: The first necessity is an abundant supply of fresh water. Many of its uses, however, may be supplied by clear salt-water; and as fresh water is scarce and expensive, the salt-water, as it arrives from the ocean through the Golden Gate, may be largely employed. Salt-water soiled with mud and the filth of the docks would not be desirable. Fresh water may be obtained from wells or from the water companies; in either case reservoirs and steam-engines are called for in distributing it where required. The land selected should be chosen, as far as possible, to obtain easy drainage, or should be graded to an inclined plane. Hence, with a copious water supply from the upper side, and sewers through the premises leading into an ample main sewer emptying into the bay below the water-level of low tide, it is easy to see that the first requirements of cleanliness are obtained. A piece of land thus selected may be entirely surrounded with a lumber or stone inclosure; or should this course be in the outset too costly, smaller spaces may be strongly fenced in. Of these the first would be for the reception of cattle on its first arrival from the country. It would be graded, or better, planked, with aqueducts leading into sewers for cleanliness; with proper water basins for the animals to drink, with sheds for their rest and protection from the sun or from the storm. Over such sheds would be receptacles for grain and fodder. There would be inclosures for different kinds of cattle, and subdivisions for the property of different butchers. The general size of such inclosures must be calculated by the monthly consumption of cattle. Through this area cars on a railroad track may pass to receive the sweepings of this court, and convey them to vats hereafter to be described. These processes are done at stated hours, and the inclosure irrigated and occasionally limed, to prevent the generation of vermin. In this manner the cattle are retained for a sufficient number of days, are well fed, and are refreshed from the heat and fatigue of their land journey, or their confinement on steamboats.

Second—The butcher now selects the animals he wishes to prepare for market. These are passed into another inclosure. Here the same general arrangements prevail—water sewerage, cars, granaries, but instead of sheds, stalls are built, in which to feed up and fatten the animals to the desired degree. Each stall has its supply of water, is inclined towards gutters for cleanliness, and is kept well limed and ventilated.

Third—Animals thus rested and refattened to repair the losses by fatigue, exposure, and privation on their journey to market, are in condition to enter the third department of the abattoir, and, commanding a higher price in consequence of their superior excellence, easily repay the apparent extra expenses of their careful keeping. In an economical and hygienic view, what incalculable extra expenses in the cost of living are spared the public by the provision of such meat. Herein, deceptions are excluded. The people know their food has undergone a systematic and legalized inspection. Neither pork, *à la trichina*, nor black meat, nor flabby, watery meat, nor veal whose mortuary report is unknown, can be distributed wholesale or by contract to inexperienced or unscrupulous caterers.

As a step of political economy, by the improved alimentation are obtained stronger men, healthier women, and more robust offspring. The third department comprises the slaughter-houses. In this inclosure a series of buildings is constructed, in number according to the demand, supplied with all the appliances for cleanly and rapid butchering. Every butcher has and controls his own building, and pays rent therefor. This arrangement supposes that an association of shareholders, not butchers, holds the enterprise. If an association of butchers enter into the system, fewer buildings would be necessary. In the latter case shambles would only be needed for extra butchers, to whom the association might wish to let or lease them. Every building stands alone, with ample space on every side for light and ventilation; is supplied with fresh and salt-water—also with hot water if desired; has pipes with the necessary traps for the escape of waste water, and is provided with all appliances the business requires.

In these shambles the animals are felled. The first product, the blood, is received in proper basins, and sold to manufacturers of preserved meats. It is also useful in the arts. The animals are then suspended, decapitated, flayed, and striped. The marketable portions having been selected, all the remainder, instead of being cast into the bay or fed to swine, is immediately collected into cars running on a railroad track and sent to the depot, where it is cast into

vats. The heads pass to a depository, to be there divided up according to the various uses of their different parts. The skins are forthwith washed with preservative fluids, to render them inodorous, are folded, bound up, and sent to tanneries in the country. Bones are sent to special places, according to the materials to be manufactured from them. For all these manipulations a few hours suffice.

Fourth Department—Now, Mr. Editor, please to walk with me through this grand laboratory. Firstly, you see it supplied with "all the modern improvements" to convey water, with drainage for the immediate escape of washings, and with a steam-engine to move the different mechanisms employed, and send steam and hot water wherever wanted. Here you find rooms to melt down tallow and lard, with hydraulic press to obtain lard oil. An apparatus is here to get the purified lard into tins, or to prepare the tallow for the candle-maker. In another hall you see the hides disposed of. In this building tongues are salted and hams prepared for the smoke-house near by.

Over here are steam crushers to break up bone, steam it, and prepare it for its conversion into gelatine, animal charcoal, or phosphorus. In this place hoofs, horns, cartilages, etc., are packed for exportation, or reduced to the shape most convenient for manufacture. From some of the materials ammonia, or salts of ammonia, are obtained, and here you perceive are the requisites for the purpose.

Next pass with me to this section of the inclosure. All these vats are supplied with cullers, mixers, or mangles, to reduce to one uniform mass or pulp all the offal cast in them from the aforesaid cars. The requisite disinfectants, quick lime, carbolic acid, salts of iron, etc., are added, aluminous earth enough or sand to obtain the required consistency and dryness are mixed in, and thus, with other necessary manipulations, that rich inodorous fertilizer of the soil, called animal manure, is produced. It acts more favorably upon exhausted land than guano, and probably may be sold at a cheaper rate.

A collateral advantage to be derived from this system is that to such a depot may be sent the garbage carts of the city, as well as the refuse and sweepings of the markets. These, instead of being thrown into the bay, or upon open lots, or concealed in cellars—whence putrid emanations, destructive to health, proceed—may be converted into inodorous, useful products, to fertilize the soil. A stringent sanitary law, compelling compliance, would thus readily divert thousands of tons of offal from the public sewers into more useful channels. You may cease to talk of the effluvia of an abattoir if you will, but think a moment of the villainous odors from decaying vegetable refuse which load the atmosphere of the city. An idea prevails that the effluvia from butcheries is not unhealthy nor malarious. The fine robust health of butchers is offered in evidence as proof of the fact. It must be remembered that the emanations to which butchers are exposed, and the atmosphere in which they are enveloped, are not filled with the gases of putrefaction. The air they breathe is impregnated with the vapors of fresh blood, and the aroma which accompanies the departing heat of newly felled animals. These odors are disagreeable to most people—butchers, by habit, become insensible to them—but they are not necessarily poisonous to health; yet it is not to them that butchers have to be thankful for their fatness, strength, and robust health. It is only such young men who can enter on the business. Their hours of labor compel temperance, and they live without stint on the most nutritious food. Enviroined with such an atmosphere they are, perhaps, shielded from a worse one. When, however, the garbage of the abattoir is allowed to putrefy, to decompose, to macerate in water, then its effluvia become as detrimental to health as any vegetable malaria producing decomposition. Water containing animal matter in a state of active putrefaction is deadly poisonous, and the air malarious which surrounds such deposits.

To conclude, then, this rapid survey of the consolidated abattoir system, I have only to add in its favor, that under good legislation it may become a useful link in the chain of systematized operations for the sanification of the city. For this great object a combination system must be inaugurated. In vain may the faithful Health Officer "follow the scent." He can accomplish, good hunter as he may be, but little. The game must be bagged by a comprehensive system.

The four departments into which I have divided my description may be so far divided as to be independent, but it is only to be remembered that offensive effluvia are evolved from the decomposition and putrefaction of organic matters, and that it is only necessary to intercept this process to anticipate it by the application of other chemical processes, and you may establish an abattoir in any convenient situation.

ARTHUR B. STOUT, M. D.

PARIS SLAUGHTER HOUSES.

They are located in La Villette, one of the outer wards of the city, just at the edge of the fortifications, where their odor cannot be offensive to the inhabitants of the city proper. They cover an immense space, larger than any thirty blocks in St. Louis, and were constructed under government authority, at the city's expense, and are constantly under the supervision of a branch of the municipal government. There is a police station, telegraph office, barracks for the troops, and a small force of soldiers always on duty within the grounds, which are surrounded by a high stone wall, and divided into regular rectangles by four avenues intersected by eight rues. The buildings are all of heavy stone, fireproof, and very well built. The Jews have a separate building where they do their slaughtering, according to their peculiar religious mode, by cutting the head of the animal entirely off with a single stroke of the knife, and not

by a stroke on the head with a mallet, as the other slaughterers here do. There are a series of cours running through each building, covered with a glass ceiling, and in these cours the slaughtering is done, and the animals are dressed on wooden frames placed at regular intervals on each side of the cour. A peculiar feature of the operation, which I have not noticed elsewhere, is that of blowing up the carcass as soon as the head and legs are cut off. The body being placed on the dressing-frame, an incision is made in the breast near the neck and the nozzle of a bellows inserted. A man then works the bellows for about fifteen minutes, until the whole carcass is swollen out like a small balloon. The reasons given for this are that it makes the meat look better, more plump, than it otherwise would, and that it enables the one who skins the carcass to get the hide off quicker and easier, without injuring it. All animals, bullocks, calves, sheep, etc., slaughtered here, are blown up in this manner. The greatest cleanliness possible in such a business is observed, and the disagreeable scents are reduced to the minimum.

A novelty in pig-butcherery is to be seen here on the avenue of the pig-stys, in the houses where they slaughter the grunters. The pigs are taken into a large round-house, something like a locomotive round-house in America, having a cupola in the roof to let off the smoke, the floor being divided into triangular dens. A dozen or so of pigs are driven into each den at a time. A man strikes each one in the head with a mallet. They fall down quietly and are laid in a row. Then the butcher comes along and cuts each one's throat, and a girl holds a basin under the pig's throat to catch the blood, which is all carefully poured into a large can and stirred by the girl to keep it from curdling. This blood is used in making the large, black sausages, so much sold in Paris. Another girl goes along the row and works the pig's front legs to keep the blood flowing, and twists the hind legs to disjoint them. A man then carries each porker to the side of the room and arranges them in a methodical row, heads all in line, and covers them with straw, which is set on fire, and burns off all the bristles rather more quickly, but in the same way as cooks scorch the pin-feathers off a fowl in America. The longest bristles have been previously pulled out by hand by one of the butchers and preserved for brush-making. After a good scorching the pigs are carried into the dressing-room, hung up on hooks and scraped all over by means of a sort of drawing-knife, handled by a skillful operator, who scrapes a pig in about one minute. Then the bodies are washed and the entrails taken out and cleaned. They utilize every part, even some of those which Americans customarily throw away. A ludicrous sight, as you walk down the avenues, are the long rows of bullocks' legs with the hoofs still on them, standing up against the walls of the slaughter-houses, toes out, awaiting purchasers.—*Correspondent St. Louis Globe-Democrat, July 10th, 1879.*

This statement is valuable to corroborate the above remarks. It is evident the government exercises a direct controlling power. The present confused state of imperial and republican legislation in France enables the municipality to enforce the regulations of hygiene. We do not of course here propose the impracticable, but Police Inspectors could efficiently replace the military authority. The benefit of their presence would amply compensate their cost by the improved health of the vicinity and increase of land values. Neither do we advocate the plan of exposing young girls to any such loathsome employment.

Mr. Codman, in his discussion, addressed to Congress on "Free Ships," we might say Codman vs. Lynch, remarks:

"One argument in opposition to free ships is founded upon the injustice that would be done to our own ship-builders. Were this true, it might be said that ship owners and the general public have some rights that ship-builders are bound to respect. The interests of our whole people are paramount to theirs." (See Economic Monographs, No. VI, page 19.)

This idea is perfectly applicable to our butchers and their dependent families, the fat makers, etc. They demand protection, because the community depends upon them for beefsteaks and chops. But if they disregard all the interests of the same community upon which they in turn depend to buy their chops, then they forget, in truth, their own interest, and become reckless of every interest except their own personal profit.

BATHS AND BATHING.

This subject asks for brief mention. Aware that it does not come within the limits of legislative action, except indirectly, we may,

notwithstanding, reach the public mind through the appeal to the State Executive on important matters of general hygiene.

The Bay of San Francisco as a salt-water bathing resort is steadily increasing in importance. On the north shore of the peninsula are four large and well equipped bathing establishments. At Alameda are five private bathing institutions, most admirably supplied with all the essential requisites, and easily accessible from the city by ferries. For safety to the bathers of all ages and both sexes, for comfort and luxury, and, with teachers to regulate and aid in aquatic exercises, as hygienic gymnasia they are worthy of a much more extended reputation than they already possess.

To more adventurous bathers the shore of the Pacific Ocean, near the Cliff House, offers the same facilities as Rockaway or Long Branch on the Atlantic coast.

Surely did Mr. James Lick, the humanitarian, understand the principles of political and hygienic economy when he donated his bequest to public baths. All enterprises of the kind to-day are private. It is time the public, with its public resources, should, as with public schools, invest its influence and express its appreciation. To prepare the way for the reception of Mr. Lick's munificent bequest, some public action might be taken, which would associate to itself the gift of Mr. Lick, equal to \$150,000.

1. To buy the site for an elevated reservoir, with pumping-works to supply salt-water and furnish the bath-house adequate and conformable to the dignity of such a bequest, together with means to pay its current expenses, could never be done on \$150,000.

2. To build a bath-house, and pay the Spring Valley Water Company for fresh water to supply heating apparatus, and running expenses, could not be accomplished with \$150,000.

3. To use salt-water near or at the beach, without elevated tank and costly pumping-works, would inflict a heavy cost in car tickets to transport the bathers to the bath, and hence they would not be free baths.

For none of these plans would \$150,000 suffice.

Let us now inquire what might be attained by a general system inaugurated and executed by competent engineers.

A foreknowledge of the point of introduction of the Lake Tahoe water, should the Tahoe project be adopted, would greatly facilitate the site and manner of works and kind of water to be selected for the Lick Public Baths, and thereby greatly economise that fund.

The great hygienic question of the day is, undoubtedly, the water supply of the State—firstly, for the large cities; secondly, for irrigation of lands; thirdly, for mining purposes. Of the cities, San Francisco is in the most urgent necessity. The route from Lake Tahoe to San Francisco is the most central, touches the most cities and towns. The water of the lake is unsurpassed for excellence, and certainty of never-failing supply. Had the work been commenced when first projected it would now be completed. But too many projects were in the field, and speculation so rife that it defeated itself. With an abundance of pure water come cleanliness, health, long life, and happiness. One would think that water like air should be free to man. Let the people at least have it without stint, and at almost free rates. (See report of A. W. Von Schmidt, 1871.)



A glance at the natural water supply of the State, as well shown on the accompanying map (see report on the Water Supply of San Francisco to the Water Commissioners, by Colonel Mendell, 1877), will convey the idea of a most perfect system. No State in the world can present such a view. On the eastern boundary the Sierra Nevada appears as a vast water-shed, with an elevation which overlooks the entire domain. A vast embranchment of rivers, with their innumerable forks, pour the mountain waters into two great confluent streams—the Sacramento from the north, the San Joaquin from the south. At their junction in the interior of the country commences the magnificent main trunk, which, flowing westward through the middle of the State, sweeps majestically through the Golden Gate into the Pacific Ocean.

Again, high in the Sierras on the eastern limit of the State is that master-work of nature's grandeur, Lake Tahoe, the consummation, par excellence, of an Almighty project to fulfill the destiny of a favored people; a reservoir not made with hands, whose masonry is imperishable; whose crystal waters, fresh distilled from heaven, need no meter to measure its economy, but lives there, its fertilizing dews giving birth to luxuriant forests, and in the silent but persistent eloquence of nature's voice inviting every man and every acre in the State to draw upon it and quench their thirst. It seems as though the Almighty Engineer, foreseeing the coming events, had taught the plan and, forsooth, almost executed it. Certainly has He executed and bequeathed the most costly sections of His vast intention. Nor is interest charged withal upon any bonds. But yet we linger and gaze and thirst, but accept not the proffered boon. Shall we wait upon the shore until the whole stream has passed by?

Let us suppose that under a dire necessity we were compelled to build a reservoir like the Lake Tahoe, no petty soluble, leaking, cracking, water-tank is it. What might be the cost of the work and the time to construct, the bonds and the interest? Yet we have it for the taking at only the cost of tapping; we dally with time and take it not. Before such advantages to the State, two-thirds of the cost already paid in as nature's free bequest, in our view, these natural resources should at once be applied regardless of the millions to be expended; while on the other hand, if we compute the actual revenues in coin, the saving of life in hygienic ameliorations, the preservation of property from conflagrations, the increase of the production of cereals, the greater certainty of crops, the greater products from hydraulic mining, and finally, the sanification of cities and towns would compensate most amply any investments.

In conjunction with such a work, we would most respectfully suggest another reform. At present there is much discontent in regard to the employment of prison labor. While manufacturers complain, it is evident that fifty cents per day for prisoners' work is underrated. This labor, if expended on such a public work, would become worth more than double to the State and the political objections be removed. This subject, however, not being strictly of hygiene, we do not seek to pursue it.

PUBLIC GYMNASIA FOR THE IMPROVEMENT OF YOUTH.

Gymnasia for the maintenance of health and inculcation of good manners and morals are the equivalents of prophylactics in medicine,

to protect the physical system from the invasions of disease. Hence, the cultivation of health and physical vigor, by the use of gymnasia, is as legitimate a subject to be entertained by the State Board of Health as is the introduction of ozone as a protection against malaria, or the construction of sewers to disinfect a city.

Mens sana in corpore sano is an old definition of perfect health, but the essential element of this state of beatitude is the *corpus sanum*, a sound body. Without healthy physical tissue, blood, brain, bone, muscle, there can be no truly sound intellect. The development of mind is consecutive to the evolution of body. As the body is built on the true principles of physical architecture, under the control of accomplished architects in nature's laboratory of man, so in its turn will evolve the educated mind to adorn the temple.

The statue of clay was first molded, and the vital spark of life was then breathed into its nostrils. To procure, then, exalted intellect and pure morals, first construct your statue right. The ancient Greeks well understood these principles of physiology and the dependence thereon of psychological evolution. To their practical application the Spartans owed their deliverance from the Persian army. The gymnasia of Greece were the pride of their educational system. Even the women were required to obtain proficiency in calisthenics, for it was a law that no young woman could marry until she had given some public proof of her physical perfection. Under such an educational regime we hear of the Spartan mother saying to her son on his going forth to battle, "rather be brought back to me on your shield than return unworthy of your country."

Xerxes' army was vanquished, and Greece was rescued.

The establishment of gymnasia in Germany is of an ancient date, and they have now become, after many vicissitudes, like a north star in her intellectual firmament. They were constituted as second class schools, between the primaries and the universities—an intermediary rung in the scholastic ladder. Originally they were instituted by the clergy as "cloister schools," but subsequently, after the Reformation, they were secularized, and now exist under the Empire as independent teachers of secular education. And they now preside in Germany as the arbiters between the liberty of free thought and the education of theocracy.

Now, we are one of the many who believe that the women of America are as noble and courageous matrons as the best and purest of Hellenic production. We feel assured that the incorporation of gymnasia in our public school system would meet with their entire approbation, and prove an invaluable relief and aid to them in rearing their offspring.

In the report of the State Board of Health to his Excellency, Governor Irwin, in 1878, page 11—Report on Prison Discipline—recommending the introduction of an educational police to oversee the discipline of the public schools, as regards the good behavior of the pupils out of school and on the streets, the following extract is presented:

Secondly—An extension of the power and authority of Boards of Education, and the creation of a reformatory educational police for minors or juveniles. Such supervising agents should be entirely distinct from the municipal police, under the direction of a tribunal of the Board of Education, and with power to make arrests—such arrests to be considered as only corrective, and divested of the intention of criminal prosecution. Such a tribunal, therefore, would be the first corrective step to warn the unruly and the unwary of their danger—in a word, the primary correction of "hoodlumism." The officers of this force should wear a distinctive uniform,

but different from that of the municipal police. Boards of Education would thus hold a corrective court, before which juvenile delinquents would be arraigned; *their parents cited*, their home discipline and education looked into, the facts recorded for future reference, and such reformatory counsel given to both delinquents and parents or guardians as would tend to prevent a recurrence of arrest or complaint. Here, then, would be a tribunal to which parents, whose children, from bad outside influences have become unmanageable, would have recourse for aid to assist their discipline.

We would not inveigh against San Francisco, in its general average of good versus evil, as compared with other great and overcrowded cities, but experience teaches that the profanity and indecent language of the street boys of San Francisco is monstrous and disgusting. It is fast surpassing the power of individuals to control. It penetrates the interior of the best families, and frustrates the best directed efforts of intelligent homes to maintain parental discipline and home education. The beautiful lessons of home are annihilated by the damning influences of the street. However we may seek to apologize for ignorance, and exonerate recklessness from blame, it is the lowlings of the street who corrupt the purity of our race and thwart education of its harvest with a withering blight. Hence a popular, universal, and legislative intervention is demanded. The shield of universal education, guarded by universal love and beneficence, can cover and protect this emergency. The enlightened people of our State will appreciate its merit, will recognize its utility, will see economy in its enactment, and public opinion will defend it.

The plan above proposed will place the whole matter under a legislative jurisdiction.

We hope not to appear importunate if we still continue to urge this suggestion.

Here appended is a description of the new gymnasium just opened by the Olympic Club, to show the perfection which the gymnastic arts have attained in San Francisco, taken from the *Alta California*, January —, 1879:

THE OLYMPIC CLUB—OPENING OF THE MAGNIFICENT NEW CLUB-ROOMS AND GYMNASIUM.

The new rooms of the Olympic Club were thrown open to the members yesterday, and were visited by large numbers of ladies and gentlemen, who had the pleasure of seeing what is claimed to be the finest gymnasium, not only in this country, but in the world. The members of the club, for some years, were dissatisfied with the location of their rooms, which were on Howard Street, at the corner of New Montgomery. In June last they made an arrangement with Mr. Barron, the owner of the property known as the Morton House, which had been vacated, and leased it for ten years. It is central in its location, and has a frontage on two streets, Post and Morton. The size of the lot is 100 feet on Post by 127½ feet deep. The original building was three stories, and was cut into small rooms and hallways. As soon as the property was secured Mr. Barron raised the building some nine feet, to make the stores on the ground floor higher. The Club have the rest of the house, and, under the direction of Mr. W. S. Lawton, the whole of it was torn down, leaving only the bare walls. A large number of workmen were employed, and everything rebuilt of the best material, with the sole idea of making the gymnasium as near perfect as possible.

The entrance to the rooms is on Post Street, and the main hall takes up the whole of the front on that street. This is a large, light, and airy room, 57.6 feet wide by 97.6 feet long, and 35 feet high. The roof has a large skylight, with ventilators, and is hung from the walls by heavy truss girders. The floor is laid of the finest timber, and is filled in below with cement to stiffen it and to deaden the sound. Around this room, about half-way up, runs a gallery six feet wide, built especially for running or walking, and it is covered with finely corrugated rubber, making a good resemblance to a turf track. The ends are raised on the outside, so that in turning the sharp curves the runner will be kept from being thrown off his balance. This can also be used as a balcony, and seats can be put there without trouble. It is reached either from the main floor, by two spiral stairs, or from the floor above. A row of benches on the main floor separates the gymnasium from the fencing and sparring hall, which is 40 by 75 feet. In this room are the lifting machines, dumb-bells, and other apparatus.

On leaving this room and entering a hall running east and west, the visitor comes to the main parlors, which front on Morton Street. There are two rooms, with folding doors and beautifully furnished. One has tables covered with papers and magazines and is to be used as a reading-room. The other is for public receptions and is fitted up with the most elegant furniture. Both these rooms are lighted by large bay windows opening on Morton Street. All the details of the rooms, the carpets, hangings, and chandeliers, are elegant and worthy of any residence. The taste of the ladies who have been consulted in these arrangements is unsurpassed. Ascending to the floor above by a broad stairway, the whole front on Morton Street is devoted to the billiard and chess-rooms. There are three new tables, with racks and cues, and in the chess-rooms are tables for eight or more players. Across the hall, which runs the whole length of the building, is the members' dressing-room. This lies directly over the fencing-room, and is about the same size. In here are bath-rooms, warm and cold water, showers and sprays, the private lockers of the members, water-closets, etc. There are also three rooms

where hot and cold baths can be taken at any time, and besides there are plenty of mirrors and all facilities for completing the toilet.

A feature of the gymnasium is the addition of a steam laundry, where the exercising clothes of the athletes are sent each day, and returned to the lockers the next morning carefully laundered.

The members of this club may be congratulated on the successful manner in which everything has been carried out by President Fletcher and Superintendent Lawton. With such attractions there should be a large accession to the number already on the roll.

The President, Mr. H. P. Fletcher, being a thorough business man, and seeing that the large outlay for fitting up the club so magnificently must be met by some more rapid accumulation of funds than will accrue through the dues of members, has devised a plan outside of club control for placing a certificate of life membership within the reach of those who choose to invest the price of one month's dues in the scheme: Each month 160 numbered tickets will be issued to those who subscribe their names, and the person holding the ticket corresponding to the number drawn from a hat, will receive a life membership certificate; yearly certificates will be given to the next six on the list. Thus the club's finances will be benefited about \$400 per month, and an equivalent in value will be given to the investors. A plan for admitting ladies to the privileges of the gymnasium on certain days will be discussed at the Directors' meeting.

The high road to national prosperity is attained through the devious paths of State education. A very important one of these is calisthenics.

Why should California not profit by these antecedents? They certainly come within the scope of the taxpayer's limit, and the utmost ambition of the *paterfamilias*. In fact, the State becomes the practical, essential father, while too often *paterfamilias* is the impotent factor. Having advocated the formation of an educational policy to insure order out of school, to repress hoodlumism, and to enforce the legislative law of compulsory education, we now suggest the creation of gymnasia as additional institutions to the public schools. One gymnasium could be adjoined to every school. In addition, a gymnasium might be built on every public plaza. At present, the plazas are only ornamental gardens and public ventilators. The addition of a work of hygiene could certainly do them no harm. It is the charm of gymnasia that all the boys like them. They all run for them; their exuberant spirits there find exhaustive employment. Their sports may be ever so bold, but being subject to a scientific and controlling discipline, can never eventuate in quarrels nor blasphemy. The great public benefit is that they are out of the streets, and exercise in safety. The advice and instruction they receive teaches good manners and the art to be a gentleman. Hence, gymnasia are practical schools of morals.

Enough has now been said to introduce the subject, and we respectfully present it to the consideration of the State Board of Health.